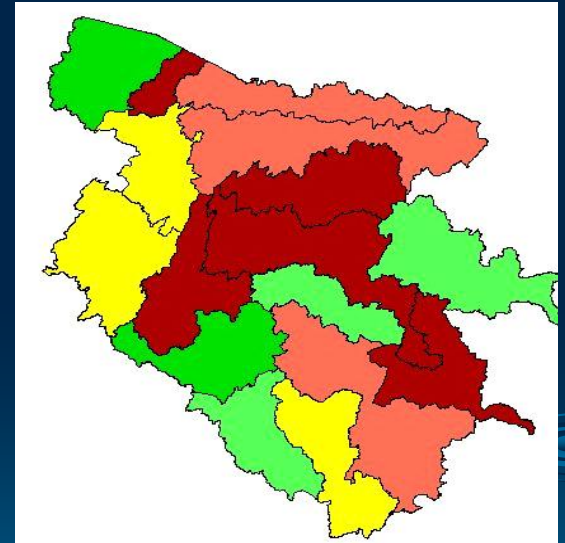




# National Watershed Condition Classification Overview



*4 Agency Partnership Annual Meeting  
October 19, 2011*



# OMB 2006 Program Review



- FS lacked a nationally consistent approach to prioritize watersheds for improvement.
- FS direction for tracking watershed condition class over time is vague and inconsistent.



# FS National Watershed Condition Team



- Establish a systematic process for determining Watershed Condition Class that can be applied consistently by all National Forests
- Improve Forest Service reporting and tracking of watershed condition
- Strengthen the effectiveness of the Forest Service in maintaining and restoring the productivity and resilience of watersheds and aquatic systems



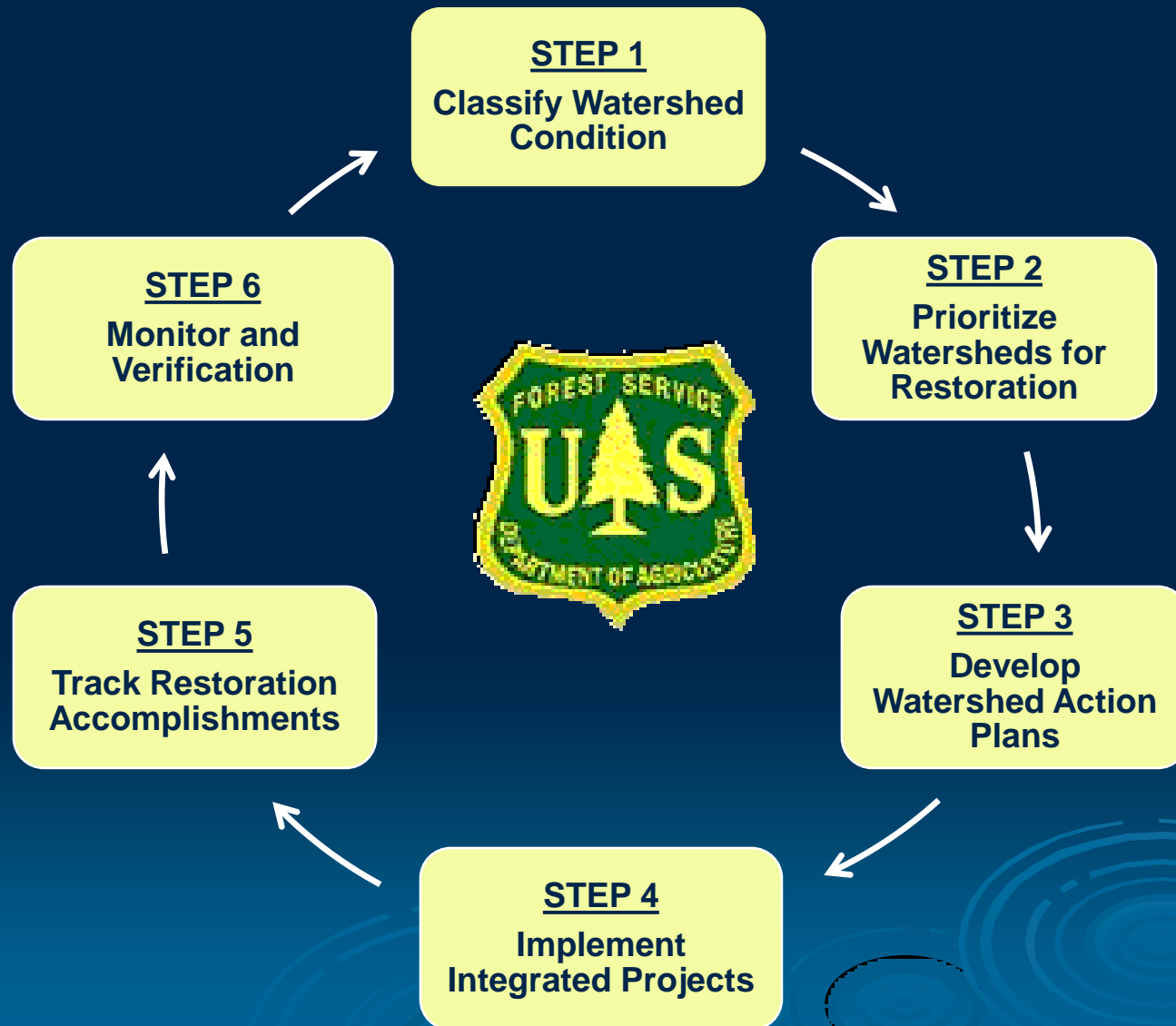
# FS National Watershed Condition Team



- Enable a priority-based approach for the allocation of resources for restoration
- Enhance coordination with external agencies and partners



# Watershed Condition Framework





## WATERSHED CONDITION INDICATORS (12 Indicator Model)

### AQUATIC PHYSICAL

(Weight = 30%)

#### 1. WATER QUALITY

1. Impaired Waters (303d Listed)
2. Water Quality Problems (Not Listed)

#### 2. WATER QUANTITY

1. Flow Characteristics

#### 3. AQUATIC HABITAT

1. Habitat Fragmentation
2. Large Woody Debris
3. Channel Shape and Function

### AQUATIC BIOLOGICAL

(Weight = 30%)

#### 4. AQUATIC BIOTA

1. Life Form Presence
2. Native Species
3. Exotic and/or Invasive Species

#### 5. RIPARIAN/WETLAND VEGETATION

1. Vegetation Condition

### TERRESTRIAL PHYSICAL

(Weight = 30%)

#### 6. ROADS & TRAILS

1. Open Road Density
2. Road Maintenance
3. Proximity to Water
4. Mass Wasting

#### 7. SOILS

1. Soil Productivity
2. Soil Erosion
3. Soil Contamination

### TERRESTRIAL BIOLOGICAL

(Weight = 10%)

#### 8. FIRE REGIME or WILDFIRE

1. Fire Condition Class OR
2. Wildfire Effects

#### 9. FOREST COVER

1. Loss of Forest Cover

#### 10. RANGELAND VEGETATION

1. Vegetation Condition

#### 11. TERRESTRIAL INVASIVE SPECIES

1. Extent & Rate of Spread

#### 12. FOREST HEALTH

1. Insects and Disease
2. Ozone



# Watershed Condition Classes

- Class 1 = Functioning Properly
- Class 2 = Functioning at Risk
- Class 3 = Impaired Function



# Rating Non-NFS Lands



## Non-FS Lands:

- We frequently lack data about non-FS lands
- Individual Indicators/Attributes not rated
- Use a subjective rating based on all non-FS land
  - *Same condition as FS Land*
  - *Better condition than FS Land*
  - *Poorer condition than FS Land*
- When in doubt - rate “Same As”
- Composite Watershed Condition Score: Area-weighted





# Approach & Constraints

- This watershed classification approach was specifically designed as:
  - A rapid, coarse filter
  - Office assessment process
  - Completed by a Forest interdisciplinary team over a short time period (< 2 weeks)
  - Use local professional judgment, relying on existing information, maps, and GIS layers



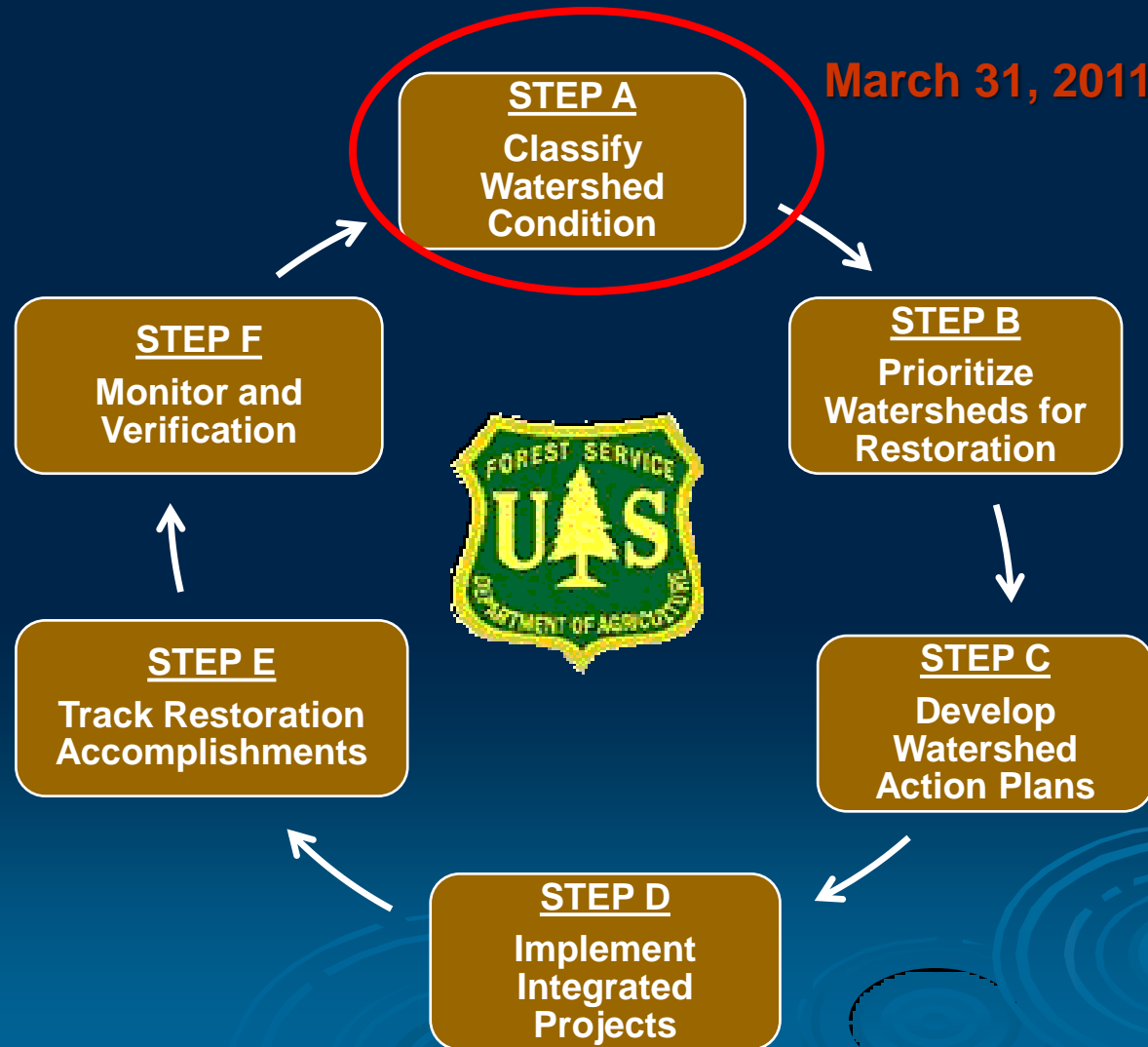
# Annual and Periodic Reassessments



- WCC is to be updated annually. Focus on:
  - Watersheds where improvement activities have been implemented
  - Watersheds that have experienced extensive natural disturbance
- Conduct a more rigorous classification of all watersheds every five years, or sooner if conditions warrant.

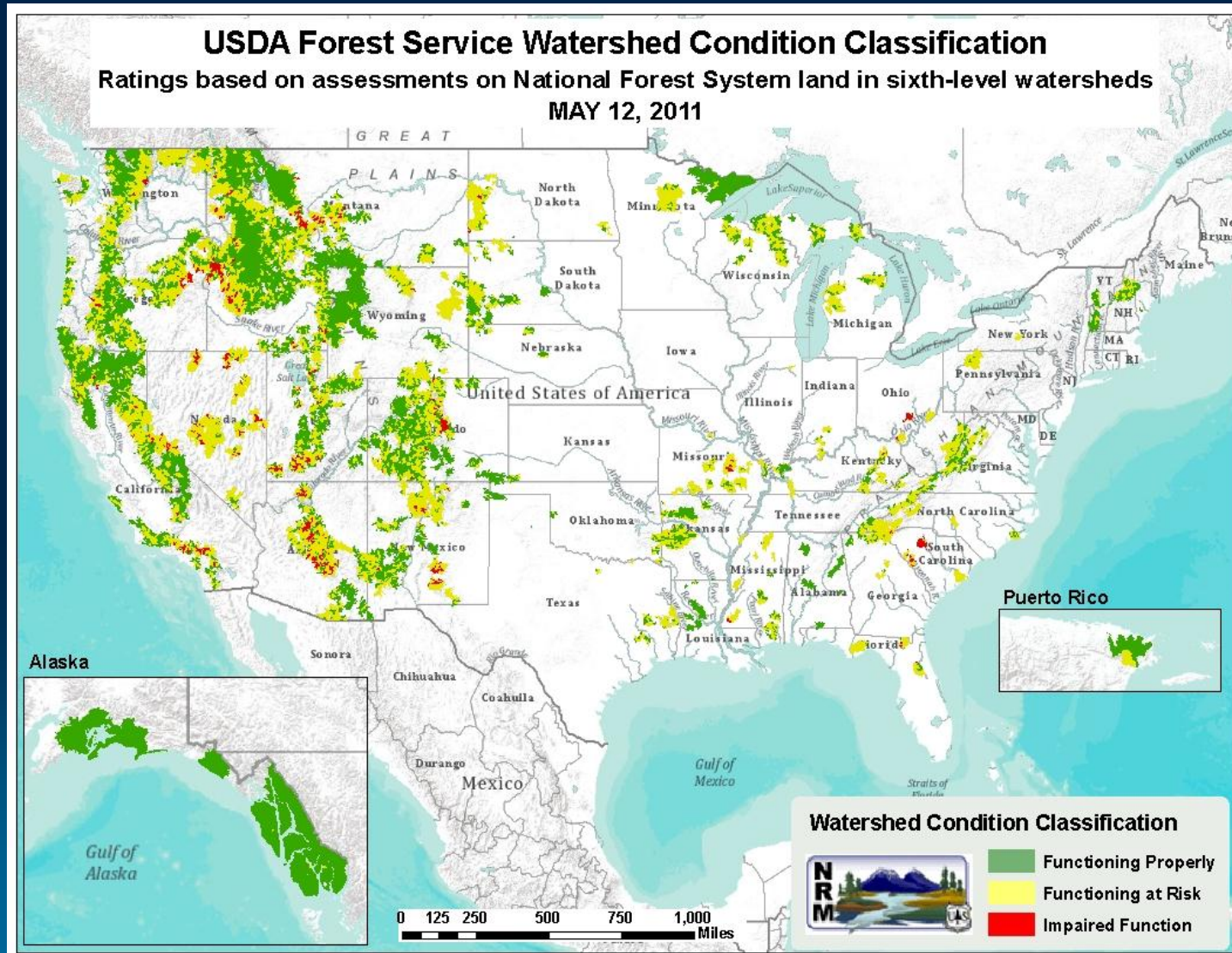


# Watershed Condition Framework





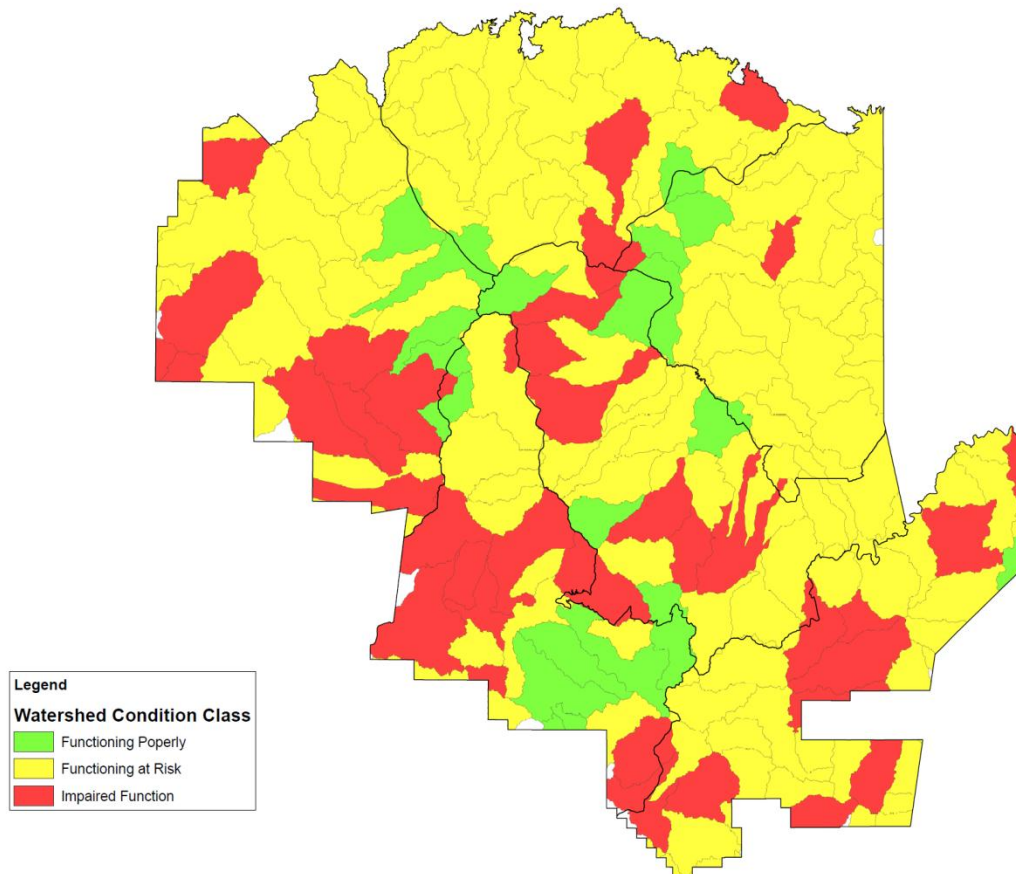
# Map of Condition Class - NFS Watersheds







## Tonto National Forest Watershed Condition Assessment



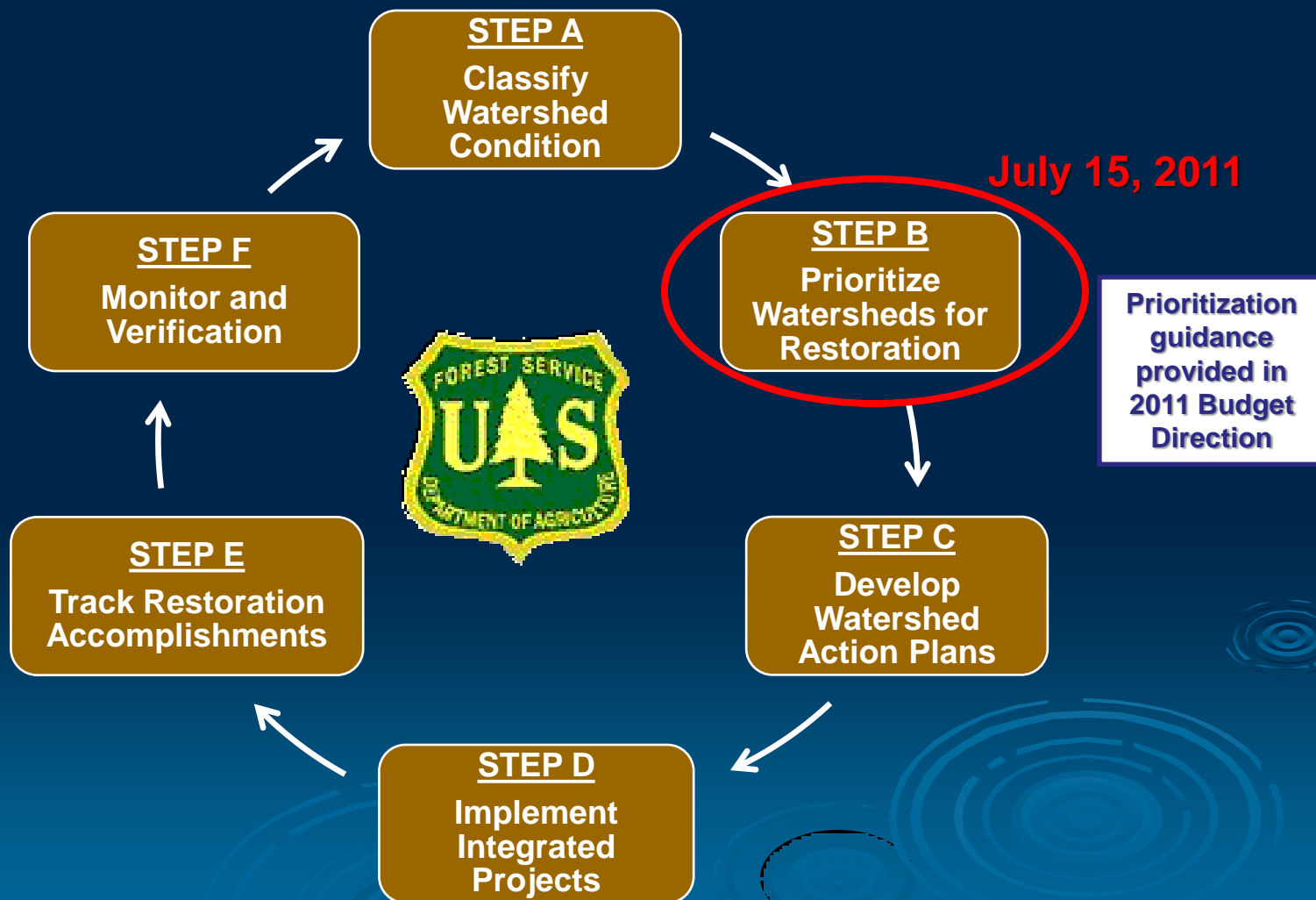


## Step A - Condition Class Results

- NFS lands only currently available to the public
  - Static national and regional maps available on web now
  - Interactive mapping tool available target date June 30
  
- Alternate approach for non-NFS lands being developed
  - Target date: End of FY '11



# Watershed Condition Framework





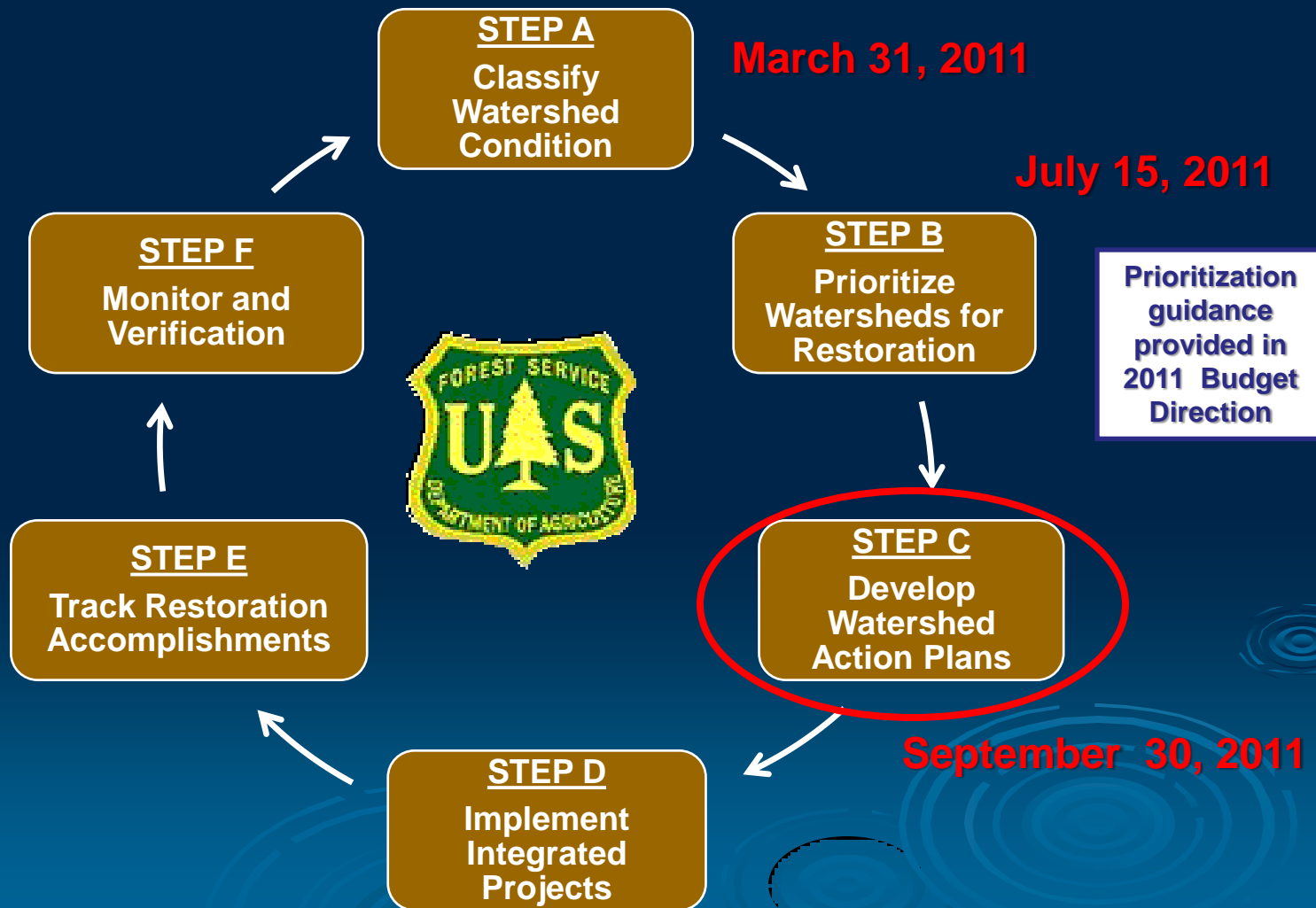
## Step B: Prioritize Watersheds for Restoration

- Small number of Priority Watersheds equivalent to a 5-year program of work for each admin unit (approx 1-5)
- Implementation Guidance – FS-977, FY11 Budget Direction
  - Collaborate with Stakeholders and Partners
  - Ecological, social, and economic considerations
  - Align with national/ regional strategies and Forest Plan direction
  - Align with outside agency efforts and partnership opportunities
- Step B to be completed by July 1, 2011
- Selection and prioritization rationale entered into WCATT database by August 15, 2011
- Documentation template available by July 15, 2011



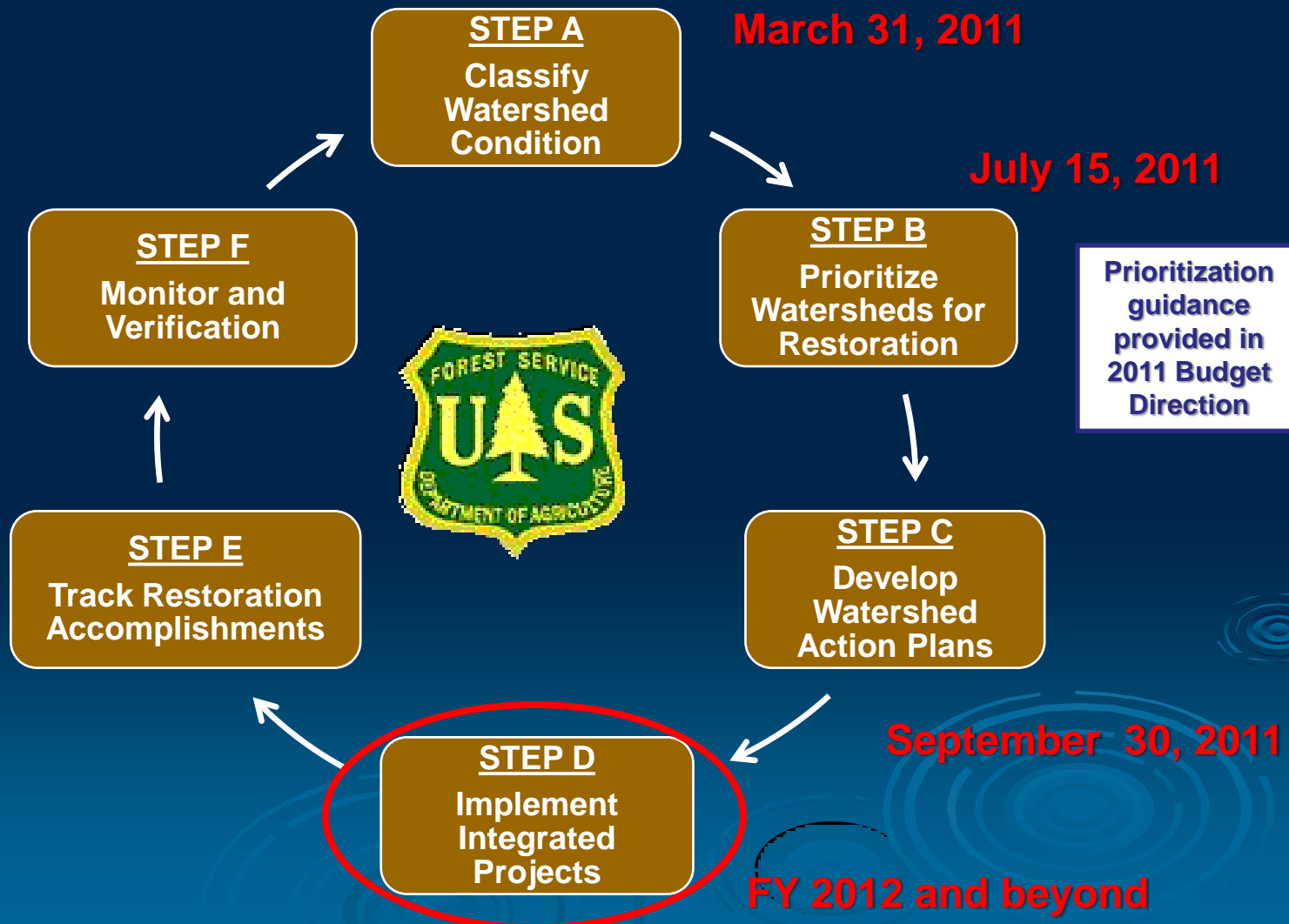


# Watershed Condition Framework





# Watershed Condition Framework





## Step D: Implement Integrated Suites of Essential Projects

- May take 1 -5 years
- Implementation includes:
  - Planning (NEPA)
  - Project design
  - Project completion
  - Completion information entered into corporate database



# Priority Watershed & Job Stabilization Initiative

- \$80,000,000 in IRR (FY12)
- Integrated restoration in priority watersheds
- Purpose:
  - Improve/maintain watershed function
  - Create local jobs
- Outcome measure: WCF

**Must be Priority Watersheds (Step B of WCF) and projects must be identified in an Action Plan (Step C of WCF)**



## In summary

The WCF provides:

- a consistent, comparable, credible process for building accountability in watershed restoration.
- a comprehensive approach for integrated restoration on watersheds on National Forests and Grasslands.
- an outcome-based performance measure for documenting improvement to watershed condition at Forest, Regional, and National scales.
- a transparent way to demonstrate that the FS is a good investment in watershed restoration



## WEB LINK

- The link below will direct you to our national website where currently you can review the WCF program documentation, interactive classification maps, and their attribute ratings. In November 2011, the interactive maps will also allow you to see Priority Watersheds, view reasons for their selection, and read the Action Plans.

<http://www.fs.fed.us/publications/watershed/>